

Math 122 - #12
Center of Mass

1. Find the center of mass of the triangle with vertices $(0, 0)$, $(6, 0)$ and $(0, 3)$.
2. Find the center of mass of the region bounded by $y = x + 2$ and $y = x^2 - 4$
3. Find the center of mass of the region bounded by $y = 8 - x^2$ and $y = \sqrt{x}$ from $0 \leq x \leq 1$
4. Find the center of mass of the region bounded by $y = \sqrt{4 - x^2}$ and $y = 0$

Answers

1. $(2, 1)$
2. $(\frac{1}{2}, 0)$
3. $(0.478571, 4.169048)$
4. $(0, 8/3\pi)$